

Amendments to the Specification:

Please replace paragraphs 0037, 0038, 0039, 0040, 0041, 0042, 0043, 0044, 0045, and 0046, with the following like-numbered paragraphs:

[0037] In a first aspect of the present invention, a rate-of-change switch comprises: a transducer that produces an output in response to an input; a differentiator that is connected to the output; and means, that is connected to the differentiator, for performing a first switching function.

[0038] In a second aspect of the present invention, a rate-of-change switch comprises: a transducer that produces an output in response to an input; a first differentiator that is connected to the output; a second differentiator that is connected to the first differentiator; and means, that is connected to the second differentiator, for performing a first switching function.

[0039] In a third aspect of the present invention, a method comprises: producing an output in response to a manual input; differentiating the output with respect to time; and performing a first switching function in response to the differentiated output.

[0040] In a fourth aspect of the present invention, a method comprises: attaching a first tilt-sensitive transducer to a person; body-member tilting the first tilt-sensitive transducer; producing a first output proportional to the body-member tilting step; differentiating the first output with respect to time; and performing a first switching function in response to the differentiated first output.

[0041] In a fifth aspect of the present invention, a method for controlling selected ones of a plurality of electrically-powered functions comprises: providing timed-opportunities for selection from successive ones of the electrically-powered functions; selecting one of the electrically-powered functions; controlling the one electrically-powered function; and the selecting step comprises manually producing an output and differentiating the output with respect to time.

[0042] In a sixth aspect of the present invention, apparatus comprises: an electrically-powered conveyance; an environmental control unit that includes a plurality of accessible control functions; a momentary-contact switch; means,

that is connected to the conveyance, to the control unit, and to the momentary-contact switch, for selectively controlling the conveyance or the environmental control unit by the momentary-contact switch; and the momentary-contact switch comprises a differentiator.

[0043] In a seventh aspect of the present invention, an electrically-powered conveyance having a wheel and an electric motor that is drivingly connected to the wheel, the improvement comprises: a transducer that produces an output that is proportional to an input; means, that is connected to said electric motor, for controlling speeds of the electrically-powered conveyance proportional to the output; a differentiator that is connected to the transducer; and means, that is connected to the differentiator, for shutting down the conveyance whenever the differentiator produces a signal that exceeds an allowable magnitude.

[0044] In an eighth aspect of the present invention, a method comprises: body-member actuating a transducer; producing an output proportional to the body-member actuating step; and performing a switching function in response to a rate-of-change of the output.

[0045] In a ninth aspect of the present invention, a method comprises: body-member producing first and second proportional outputs; and controlling both first and second proportional functions and a switching function of an apparatus in response to the outputs.

[0046] In a tenth aspect of the present invention, a method comprises: body-member producing first and second proportional outputs; and selecting between a first apparatus and a second apparatus, controlling first and second proportional functions of the first apparatus, and performing a switching function of the second apparatus in response to the outputs.

Please add the following new paragraphs after paragraph [0046]:

[0046.1] In an eleventh aspect of the present invention, a method comprises: body-member producing first and second proportional outputs; and selecting between a first apparatus and a second apparatus, controlling first and second proportional functions of the first apparatus, cascading task

opportunities, selecting a task, and controlling the selected task in response to the outputs.

[0046.2] In a twelfth aspect of the present invention, a switch comprises: a mechanical to electrical transducer; a differentiator that is connected to the transducer; and a comparator that is connected to the differentiator.

[0046.3] In a thirteenth aspect of the present invention, a switch comprises: a transducer that produces an output proportional to an input; and means, that is connected to the transducer, for producing a switching function whenever a rate-of-change of the output in a selected direction reaches a predetermined magnitude.

[0046.4] In a fourteenth aspect of the present invention, a method comprises: activating an apparatus; and the activating step comprises manually actuating a transducer and differentiating an output of the transducer.

[0046.5] In a fifteenth aspect of the present invention, a method comprises: selectively activating a first or a second apparatus; and the selective activating step comprises manually actuating a transducer and differentiating an output of the transducer.

[0046.6] In a sixteenth aspect of the present invention, a method comprises: initiating cascading of a plurality of task opportunities; and the initiating step comprises manually actuating a transducer and differentiating an output of the transducer.

Please replace paragraph [0077] with the following amended paragraph:

[0077] Referring now to FIGURE 1, a control system 10 is provided for control of an electrically-powered conveyance, or power wheelchair 12, and an environmental control unit (ECU) 14 by an X-Y input device, such as a tilt-axis X-Y input device, or tilt-axis X-Y transducers 16, that are tilt sensitive, and that may be mounted to a head 18 of a person 20.

Please replace paragraph [0082] with the following amended paragraph:

[0082] Referring again to FIGURE 1, when activated by the timed-opportunity switch 26, the person 20 can control direction of propulsion,

speeds of propulsion, and steering of the power wheelchair 12 by moving the head 18 in X and Y directions, as marked, thereby body-member actuating or body-member tilting, the tilt-axis input device 16. Movements of the head 18 in Y directions control forward and reverse speeds, and movements of the head 18 in X directions control turns.

Please replace paragraph [0169] with the following amended paragraph:

[0169] The discriminator 160 produces two outputs, 164A and 164B, one each for increasing and decreasing velocities (dy/dt) of the ~~input~~ Y input of the transducer 152, as taught in conjunction with FIGURE 1. In like manner, the discriminator 162 produces two outputs, 166A and 166B, one each for increasing and decreasing accelerations (d^2y/dt^2) of the Y input.